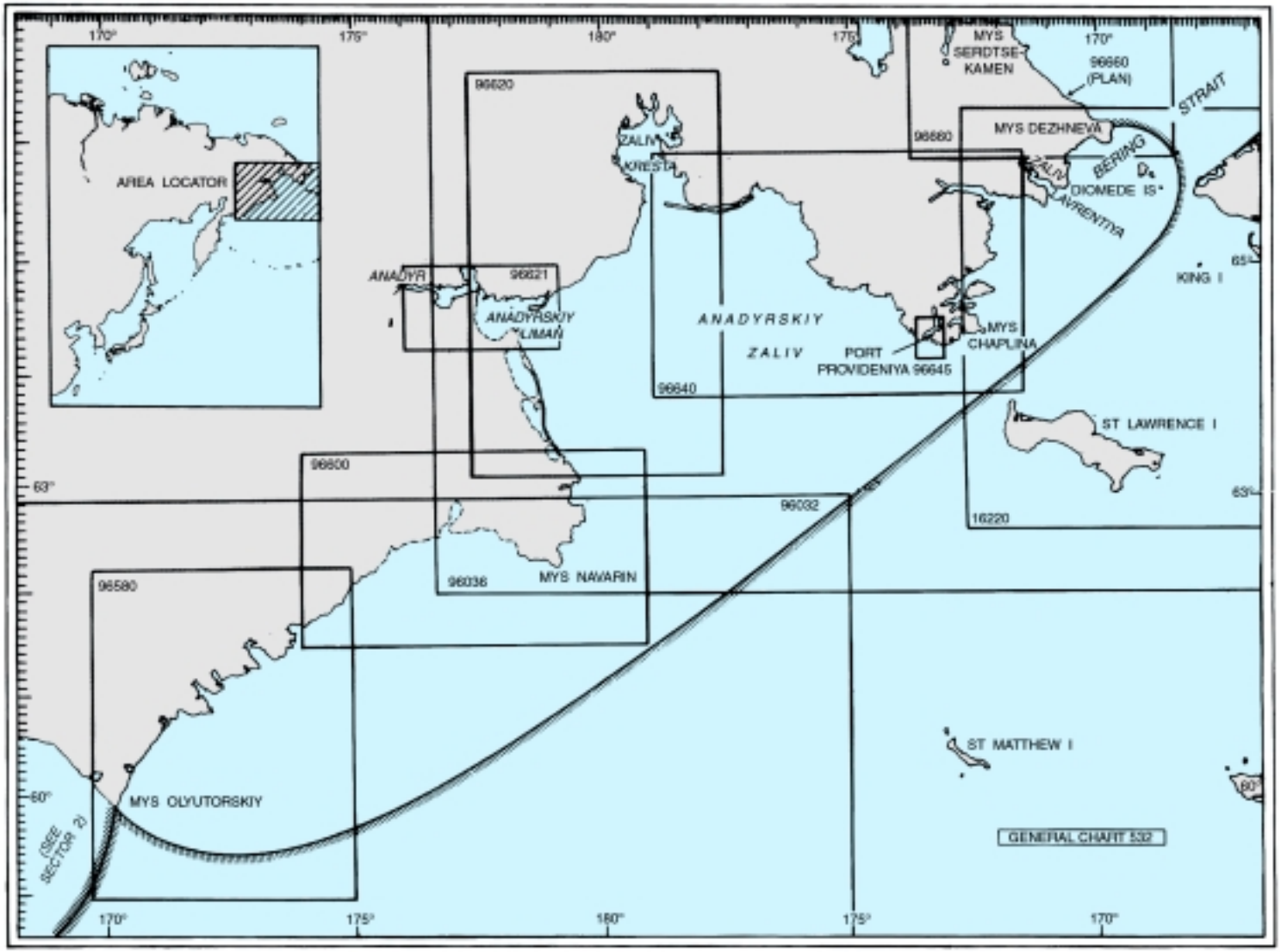
Table of Contents



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR **1** — CHART INFORMATION

Double click on "See Sector" to be hotlinked to the Sector.

Table of Contents

SECTOR 1

EAST COAST OF RUSSIA—MYS DEZHNEVA TO MYS OLYUTORSKIY

Plan.—The coast described in this sector comprises the W side of the Bering Strait, Anadyrskiy Zaliv (Gulf of Anadyr), and the N shore of the Bering Sea to **Mys Olyutorski** (59˚55'N., 170˚21'E.). The arrangement of the sector is from E to W.

General Remarks

1.1 Russian regulations for the protection and hunting of marine mammals must be observed by vessels navigating in the waters described by this sector.

Ice.—Anadyrskiy Zaliv is normally covered by solid ice by the latter half of November and begins to clear in May. This ice is occasionally penetrable by powerful icebreakers.

Ice first appears in Anadyrskiy Liman in September or the beginning of October, and the bay is said to be frozen solid later in October. The ice frequently remains until the middle of July. Vessels are said to normally call from July until the middle of October.

According to a Russian source, sludge ice appears in Zaliv Kresta at the end of September and the bay is solidly frozen by mid-November. Occasionally, the ice is broken up and carried out of the bay. The period of breakup is generally June, but drifting ice sometimes remains until mid-July.

The Bering Strait is generally free of ice by the first week of July, sometimes earlier, and the strait and the area immediately N usually remain free of ice until October.

Zaliv Lavrentiya usually begins to freeze over during the first week in October. Toward the middle of the month, by which time N winds generally prevail, the ice is thick along the shores, but does not block the entrance channel. By the end of October, the inlet is usually covered with solid ice. The ice usually begins to break up in June.

A vessel intending to stay for a long period in Zaliv Lavrentiya may be held up by drift ice, which sets through the Bering Strait and is driven into the entrance of the inlet where it packs, and may close it for a considerable period.

Mys Dezhneva to Zaliv Lavrentiya

1.2 **Mys Dezhneva** (66˚05'N., 169˚38'W.) is the E extremity of the mountainous peninsula at the NE end of Russia. This peninsula, which appears as an island when seen from the offing, is in general steep-to, with depths of 20m close offshore, but with rocks close to the cliffs. The coasts of the peninsula consist mainly of dark-colored cliffs rising in jagged terraces steeply from the sea. On the W side of the peninsula the mountains slope gently toward the mainland and merge into a low, hummocky, tundra-covered isthmus. The summits of the mountains are generally covered by dense fog and clouds.

Mys Uelen (Mys Uellen) is situated about 5 miles NNW of Mys Dezhneva. Some above-water rocks are located near Mys Uelen. A sunken rock is located about 2 miles ESE of the cape.

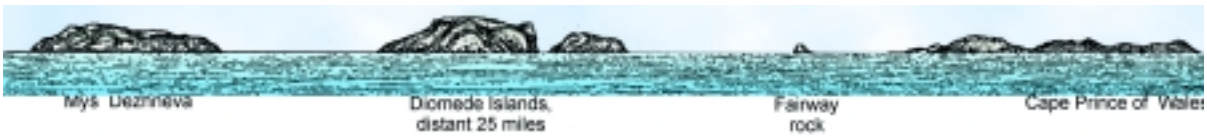
Mys Peek (Mys Peyek), about 5 miles SSW of Mys Dezhneva, is lofty, bold, and rugged. Mys Peek is visible from the S in clear weather at 30 to 35 miles. Pamyatnik Dezhneva Light is shown from a square tower about 0.7 miles N of Mys Peek. A short distance N of Mys Peek is a small stretch of coast where landing is possible, and in this vicinity is the settlement of Naukan, situated at a considerable elevation on a mountain slope.

Bering Strait, about 45 miles in width between Mys Dezhneva and Cape Prince of Wales, has general depths of 38 to 55m. In winter, N winds prevail; in summer, S winds prevail, but changes in direction and strength are more frequent. Summer fog is frequent. Unless there is an unusually late spring, the strait is free of ice by July.

1.3 **Diomede Islands** (65˚46'N., 169˚00'W.), consisting of two steep-to islands in the middle of the Bering Strait, rise abruptly from the sea with nearly vertical sides. Their summits appear as broken tableland. **Ostrov Ratmanova** (Big Diomede Island) (65˚48'N., 169˚05'W.), the W and larger of the two, is fringed on its W side by above-water rocks. Little Diomede Island, about 2.5 miles SE of Ostrov Ratmanova, has a sandspit extending from about the middle of the W side of the island, and from the outer end of this spit a reef extends an unknown distance toward the S extremity of Ostrov Ratmanova.

The boundary between Russia and the United States passes between the two islands. The passage between the islands, W of the above-mentioned reef, is reported to have a depth of about 35m and to be clear of dangers, but it should not be attempted by a large vessel.

At the SW end of Ostrov Ratmanova is the settlement of Nunarbuk, close off which are depths of 20 to 26m, sandy bottom. Farther offshore the bottom is stone, poor holding ground. The settlement of Ignaluk is situated close to the sandspit on the W side of Little Diomede Island.



Bering Strait from SSW

Fairway Rock (65˚37'N., 168˚45'W.), about 7.5 miles SE of Little Diomede Island, is a high and steep rock with a flat top. It is steep-to and there are no off-lying dangers.

Anchorage.—Anchorage can be obtained close S of the sandspit on the W side of Little Diomede Island, but the holding ground is poor, consisting of rocks. A vessel proceeding to this anchorage from the S or E can follow the S and W coasts of the island, keeping in depths greater than 26m until the settlement of Ignaluk is sighted.

Anchorage can also be obtained off the N side of Ostrov Ratmanova.

1.4 The coast slopes down from Mys Peek to a low sandy beach near Dezhneva, a deserted trading post about 6 miles WNW. The coast between Mys Peek and Mys Litke, about 22 miles SW, is generally steep-to, with depths of 10m about 1 mile offshore. Mys Litke may be easily identified by a sharp-peaked mountain rising above it.

Mys Nunyamo (65˚36'N., 170˚40'W.) lies about 13.5 miles SSW of Mys Litke. The coast for about 9 miles S of Mys Litke becomes lower with several bold points. Black cliffs which rise steeply from the sea extend 4 to 5 miles NE of Mys Nunyamo.

Anchorage.—Anchorage can be taken, during N winds, abreast the deserted Dezhneva trading post in 9 to 10m, good holding ground, 1 mile offshore, or in 5m, 0.25 mile offshore.

Zaliv Lavrentiya

1.5 Zaliv Lavrentiya (St. Lawrence Bay) is entered between Mys Nunyamo and Mys Kriguygun, 12.5 miles SW. The NE side has the appearance of a desert waste and is similar to the SW side, except that the cliffs are higher and the hills, though not high, are nearer to the shore. The soil is damp and has high concentrations of clay, and in places is covered with moss and grass. Peat is found in the depressions and on the hillsides. The low ground consists of large tracts tundra.

High, steep, sharp-peaked mountains, apparently of a range that extends across the Asiatic mainland, approach the head of the bay and extend around the inner part of the bay, but then merge into a series of low rounded hills. **Gora Vkhodnaya** (Tyrtova) (Tuirtof) (65˚42'N., 171˚04'W.), 500m high and the most conspicuous mountain, is located on the NE side, about 10.5 miles NW of Mys Nunyamo.

The entrance has depths of 12.8 to 14.6m in the fairway. The bay has general depths of 24 to 62m. The inner one-third should not be used without local knowledge.

Mys Nunyamo, the NE entrance point, is easily identified by a conspicuous round-topped mountain, 360m high, near it. A light is shown from the point. The W side of the mountain slopes gradually to a wide ravine, down which flows a very small and very rapid mountain stream. A steep mountain, 430m high, is located near the coast, 2.2 miles NE of the cape.

1.6 **Mys Kriguygun** (Cape Novosilski) (Cape Krigugon) (65˚28'N., 171˚02'W.), the SW entrance point, is a lofty and very steep headland formed by a mountain with several remarkable peaks, the highest of which attains an elevation of 443m. A light is shown at the point. Because of its height, the cape appears as an island when seen from the S. Yandagai, a large village, is situated on the cape.

From Mys Nunyamo to Mys Pinakul, about 5 miles WNW, the shore is level and consists of low cliffs, inland of which the ground is tundra and gradually rises to low, rounded hills from 0.5 mile to 2 miles inland.

Ostrov Litke, with its E extremity about 1 mile W of Mys Pinakul, is a sand and shingle islet about 0.7 mile in length in an E-W direction. The islet is difficult to make out in the offing because it has an almost level surface and is only about 1.8m high. Its highest part is covered with moss and there is a fresh-water pond on the islet. A bank, with depths of less than 5m, joins the islet to Mys Pinakul. A reef, with depths of 5.5m, extends W from the W extremity of the islet. The extremity of this reef is steep-to, with a depth of 35m close off it. A light is shown from Ostrov Litke.

1.7 **Inner part of Zaliv Lavrentiya.—**Mys Pavlova projects from the NE shore about 8.5 miles WNW of Mys Pinakuf, while Mys Inoreniusa projects from the SW shore 2.25 miles WNW of Mys Pavlova. Only vessels with local knowledge should navigate in that part of the inlet above Mys Pavlova and Mys Indreniusa.

In the inner part are two islets, Ostrov Benneta and Ostrov Balka. Ostrov Benneta, the S islet, is surrounded by reefs, with depths of less than 7.3m, which extend as far as 0.5 mile from it, and there is reported to be a submerged spit extending S from this islet. A 4.9m shoal is reported to lie about 1.3 miles SE of this islet, and a depth of 9.1m has been obtained close N of this danger.

Tides—Currents.—The tidal rise in Zaliv Lavrentiya does not exceed 0.3m, but heavy gales may raise or lower the water level by as much as 1.1m.

The tidal currents are reported to be strong. The Russian vessel Yakut dragged both anchors in Gavan' Litke because of the pressure of ice on her cables during the ebb current. Eddies are formed in Gavan' Litke.

Anchorage.—Gavan' Litke, formed by Ostrov Litke and the bight on the N side of Mys Pinakul, affords good anchorage in depths of 20 to 29m, mud. However, this harbor is said to only be safe at the end of August and during the month of September. At other times vessels should keep steam up in readiness to sail in case masses of drifting ice from the Bering Strait threaten to jam the entrance of Zaliv Lavrentiya. Vessels should avoid anchoring with the W extremity of Ostrov Litke bearing less than 180˚, as the depths there increase rapidly to 50 to 55m.

Bukhta Strelok, entered N of Mys Pavlova, affords good anchorage over a bottom of sand, good holding ground. It has depths of 3.7 to 7.3m close to the shore.

Good anchorage can be obtained in depths of 22 to 29m in that part of Zaliv Lavrentiya above Mys Pavlova.

Directions.—The W extremity of Ostrov Litke, in line bearing 327˚ with Gora Vkhodnaya, leads into Zaliv Lavrentiya in a least depth of 12.8m, but caution should be exercised as this range line passes close SW of a 7.1m shoal in the middle of the entrance.

Zaliv Lavrentiya to Proliv Senyavina

1.8 The coast from Mys Kriguygun to **Mys Lyugren** (65˚30'N., 171˚40'W.), a high steep point 15.5 miles W of Mys

Kriguygun, is low and rises gently to flat-topped mountains. This stretch is steep-to and clear of dangers.

Mechigmenskiy Guba has an entrance less than 0.2 mile in width between the extremities of two very low spits. The E spit, which is almost awash, extends about 10 miles W from Mys Lyugren. The W spit extends about 5 miles NE from the W shore. The entrance can only be identified when bearing about 340˚. On other bearings the entrance can be made out only from aloft in clear weather. The village of Mechigmen, consisting of a few huts and situated on the W spit about 1.5 miles SSW of the entrance, is a convenient mark for identifying the entrance. The village of Raupelyan is situated on the E spit, about 2.5 miles E of the entrance.

The least depth in the approach is 5.8m near the E spit. The entrance has depths of 18.3 to 24m, but inside the depths decrease. Both spits are steep-to. Within the inlet E of Raupelyan, a channel 0.75 mile wide, with a depth of 9.1m, runs in the direction of the E spit. Northward the depths suddenly decrease to 5.5m. Mechigmenskaya Guba, other than a small part inside its entrance, has not been surveyed.

Winds—Weather.—Westerly winds accompany dangerous squalls at times.

Tides—Currents.—The outgoing tidal current, which attains a velocity of 4 to 6 knots in the entrance, sets on to the W spit and then follows the coast S for several miles. Vessels should exercise caution in entering.

Anchorage.—Good anchorage can be obtained anywhere outside the entrance. Inside the inlet, anchorage can be obtained in 5 to 9m, mud and sand, but the holding ground was reported to be poor and there are many shoals. Anchorage inside the inlet is only recommended in an emergency, and then only for vessels with a draft of less than 3m.

The coast from Mechigmenskaya Guba to **Mys Ngeegchan** (64˚55'N., 172˚25'W.) is in general low and backed by mountains which approach the coast only at **Mys Khalyuskina** (65˚16'N., 172˚11'W.), which rises to a conspicuous round hill. The coast N of Mys Khalyuskina consists of sloping tundra, with cliffs in some places and low ground in others.

Mys Nygligan (Mys Nygchigen) (65˚04'N., 172˚06'W.), when seen from about 15 miles N or NE, appears as an island. It is bluff and rugged. A light is shown on the island.

Between Mys Nygligan and Mys Ngeegchan, about 12 miles SW, as well as off these two points, the depths decrease gradually offshore. About 10 miles off Mys Nygligan the depths decrease suddenly to about 9.1. As foul ground may extend off this cape, it should not be approached too closely.

The bay between Mys Nygligan and Mys Kriguygum 36 miles NE is known as Mechigmenski Zaliv.

Proliv Senyavina and Proliv Chechekuyum

1.9 Between Mys Ngeegchan and **Mys Mertensa** (64˚32'N., 172˚25'W.), about 23 miles S, the coast recedes to form a bight, a large part of which is occupied by two islands. The passage around Ostrov Arakamchechen, the N and larger island, is known as Proliv Senyavina, while the passage between Ostrov Yttygran, the smaller island and the S shore of the bight is known as Proliv Chechekuyum. Proliv Senyavina is not difficult to navigate because of its great depth and the absence of dangers. The bottom in this passage is mud, while E of the bight it is fine sand. A bottom of rocks and shells distinguishes the shallower depths. Proliv Chechekuyum should not be used without local knowledge. The chart indicates that the fairway is deep.

Along the shores of the bight are high granite mountains, which, except for their peaks and steep cliffs, are covered by tundra. The valleys are covered with grass, flowers, and mushrooms. Aspen and birch are found on the shores.

Ice.—The final disappearance of ice in Proliv Senyavina and in the sea nearby is prolonged almost until the new ice forms, because of the heavy accumulation of ice during the eight cold months and the prevailing E and SE winds in the summer.

1.10 Northwest side of Proliv Senyavina.—Mys Ngeegchan, the N entrance point of the N entrance to Proliv Senyavina, rises steeply to Gora Chernaya (Black Summit), 283m high. A conspicuous hill is located about 5 miles NW of the cape.

From Mys Ngeegchan to about 8 miles SW, the coast consists of low tundra extending from 1 to 2 miles inland. In the vicinity of Ozero Kheyguyn the tundra stretches a considerable distance inland and the mountains become higher as they recede W. Mys Kaskonok, about 10.5 miles SW of Mys Ngeegchan, is the S extremity of a low sandy spit. From about 2 miles NE of Mys Kaskonok to a position close to that cape the coast is cliffy and rises steeply to high mountains, among which is a conspicuous summit about 579m high, about 1.5 miles N of the cape. Another conspicuous peak is located about 6 miles NE of the cape.

A river flows into Ozero Kheyguyn, a shallow lake, and then into Proliv Senyavina between two sand spits about 2.5 miles W of Mys Ngeegchan. Yakrakinot, a native village, lies on this spit near the river mouth. The mouth of the river is about 90m wide, has a depth 3.7m, mud bottom, and forms a good harbor for small craft. Anchorage may be taken by small craft close inshore. The current is strong in the river mouth, but is not felt along the coast. The W spit is separated from the mainland by a narrow, shallow passage. A bay, entered between the SW end of the W spit and the mainland N, offers shelter to small craft in depths of 3.7 to 4.6m in the entrance, SW of the spit.

Bukhta Penkigney (Bukhta Penkigngen) is entered between Mys Kaskonok and Mys Irankhi, about 3.5 miles S. The fairway to the inner part of the inlet is deep. The main entrance is S of Ostrov Achinkinkan, a low flat islet about 0.5 mile S of Mys Kaskonok. A reef extends 0.2 mile SW from the islet. Ostrov Merokinkan, about 1.2 miles NW of Ostrov Achinkinkan and of similar aspect, is a low, flat, and rocky islet.

Bukhta Penkigney is bordered by high mountains, which in most places lie close to the shores. On the SW side inside the entrance the mountains rise precipitously from the sea. One of these has a remarkable red slope. In some places tundra extends a short distance inland. At the head of Bukhta Penkigney the mountains recede inland and a shallow stream flows through extensive wet tundra into the inlet. The shores are for the most part bluff, but several spits extend from them.

A high round peninsula, about 6 miles NW of Mys Irankhi, extends N from the S side of the inlet. Bukhta Alera, entered SE of this peninsula, is open to the E. This small inlet has

depths of 11 to 26m, but the bottom is rocky and the bay is of little importance.

On the NW side of Bukhta Penkigney, 7 miles W of Mys Kaskonok, there is a bay entered between a low sandy headland and a steep headland about 2 miles further SSW. A reef, with a depth of 2.7m, extends about 0.6 mile NE from the S entrance point.

Tides—Currents.—In Bukhta Alera the spring range is 0.2m and the mean range is 0.2m.

Anchorage.—The small bay just mentioned has depths of 12 to 28m, mud, sand, and shells, and affords fairly sheltered anchorage. A vessel has anchored in 28m here.

Anchorage with good shelter can be obtained in depths of 11 to 22m, mud, sand, and in places, stones, from 1 to 1.5 miles off the head of Bukhta Penkigney.

1.11 Mys Kygynin (64˚45'N., 172˚05'W.), the E point of Ostrov Arakamchechen, is a low cape, very similar to Mys Nygchigen, about 19 miles N.

From a great distance, a small hill in the vicinity of this cape appears as an islet. From a distance of about 14 miles, this hill merges with the mountains and only a continuous line of coast, about 25m, is then seen. Mys Kygynin should be given a wide berth, as the 10m curve lies as far as 1.8 miles off it and the coast on either side.

The W two-thirds of Ostrov Arakamchechen consists of mountains with flat summits, the highest of which, Gora Athos, 576m high, is located about 9.5 miles W of Mys Kygynin. These mountains slope down rather steeply on their E sides to the remainder of the island, which consists of smooth tundra and numerous lakes. The coasts of the island are slightly indented in places, the only harbors being Gavan' Glazenapa, at the SW end of the island, and Gavan' Ratmanova, at the N end of the island.

1.12 North and W sides of Ostrov Arakamchechen.—The greater part of the N coast of the island is low and sloping, with only two or three cliffs. Mys Kuguvan, the N extremity of the island, lies 9 miles NW of Mys Kygynin and rises perpendicularly to Gora Kruglaya, a conspicuous rounded mountain, 320m high.

Kosa Akhmatingu is a spit of land extending about 1 mile WSW from a position on the coast about 1 mile SW of Mys Kuguan.

Gavan Ratmanova (64˚49'N., 172˚28'W.) is entered between the SW extremity of Kosa Akhmatingu and Mys Nayakuk, about 1 mile WSW. A shoal, with a depth of 2.4m, lies 0.3 mile WSW of the SW extremity of Kosa Akhmatingu. Another spit extends from the S side of Gavan Ratmanova, about 0.7 mile SW of the NE entrance point. The coast within the two spits is bordered by a shallow sandbank extending 0.1 to 0.2 mile offshore.

Anchorage.—Anchorage can be obtained in depths of 7 to 11m, close SW of the NE entrance point in an area about 0.2 mile wide. Vessels can enter the harbor by passing about 0.1 mile off the NE entrance point and can secure alongside Kosa Akhmatingu, close off which are depths of 4m, increasing rapidly offshore.

From Mys Nayakuk to Mys Taylek, about 8.5 miles SSW, the coast is rocky and rises gently to the mountains in the middle of the island. For the first 3 miles the coast forms a slight indentation, where sheltered anchorage can be obtained in depths of 12.8 to 14.6m, mud and sand, about 0.2 to 0.3 mile offshore. Winds from the SW through W to NW raise a considerable sea here, but the swell is not dangerous.

Ostrov Kynkay, about 2 miles WSW of Mys Taylek, is a small, rocky, steep, and almost barren islet, with a fairly flat summit.

1.13 South side of Ostrov Arakamchechen.—Mys Myergyn (64˚41'N., 172˚36'W.), about 1.5 miles ESE of Mys Taylek, is the SW extremity of a low spit. This spit extends in a SW direction from the low ground on the E side of Gora Menyngay, a conspicuous mountain, 340m high, located about 1.2 miles NNW of the point.

Gavan Glazenapa (64˚41'N., 172˚37'W.) is a harbor formed by a bight in the coast between Mys Yarga and Mys Taylek, the SW extremity of a steep-to spit extending about 0.3 mile WSW from the SW side of Ostrov Arakamchechen. A shoal, with a least depth of 11m, is located about 1 mile SSW of this point. At the head of the harbor the land rises steeply to the summit of Gora Menyngay. Westward of this mountain are two 91m hills, which, with the mountain, form excellent landmarks for the harbor.

This harbor is protected from the NW through N to NE winds, but considerable swell sets in during winds from other directions. Mys Yarga is so low that it affords little protection from E winds. The harbor, however, affords good shelter from ice and is easy to enter. The shores are steep-to, and the spit on the E side has sufficient depths close off it for vessels to make fast alongside. The best anchorage is reported to be in 33m, blue clay, good holding ground, with Mys Yarga bearing about 170˚.

Banka Bruks (Brooke Bank) (64˚37'N., 171˚58'W.), an offlying danger on which are several rocks that uncover at LW, extends about 1.5 miles W from a position about 9 miles SSE of Mys Kygynin. Depths of 11m have been obtained about 1.5 miles N and 3 miles S of the E end of this bank.

1.14 Ostrov Nuneangan (64˚38'N., 172˚20'W.), about 3 miles E of Ostrov Yttygran, is a good landmark in the S approach to Proliv Senyavina. The islet is small, bluff on all sides, and has a summit covered with verdure. The NE and SW sides of the islet should not be approached, as reefs extend offshore from those sides. A bank, with depths of less than 9.1m, and on which are said to be many reefs, extends from Ostrov Nuneangan to the E side of Ostrov Yttygran.

Anchorage near this coast should be avoided when ice is being driven S by the wind as it sets directly onto it.

The E coast of Ostrov Yttygran, from **Mys Amago Mel'got** (64˚36'N., 172˚27'W.) to Mys Novok, 1.5 miles N, and then to Mys Konovak, 2 miles NW, consists of low cliffs rising in places to high bluffs. Two conspicuous hills, about 151m and 230m high, are located about 1 mile and 2 miles W, respectively, of Mys Novok. A conspicuous mountain, 346m high, is located about 1 mile SW of the same cape.

Bukhta Stygrak, with its E entrance point about 3 miles W of Mys Konovak, is bordered W by a steep black cliff about 1.5 miles farther WNW. The bight is reported to have depths of 18 to 22m, but it is exposed and the holding ground is poor. Wet

tundra extends from the lake at the head to the S side of the island.

The coast from the W entrance point of Bukhta Stygrak to Mys Am'yak, 2.5 miles SSW, is steep and high, without bluffs, and rises to a hill composed entirely of gray and white marble.

Mys Engelyukak (64˚35'N., 172˚31'W.), the SE extremity of Ostrov Yttygran, can be identified by a low hill with a rounded summit. Between the above point and Mys Yuvakhtakhat, about 0.7 mile W, there is reported to be anchorage in the bight in 14.6m, stones over mud. Bukhta Tugak, an open bay immediately W of the bight, has a high hill with a steep slope near its head. Two mountains, one 587m high and the other 529m high, lie near the center of the island, about 2 miles NNW and 2.7 miles NW, respectively, of Mys Yuvakhtakhat.

Mys Am'yak, the SW extremity of Ostrov Yttygran, is the termination of a low spit extending about 0.2 mile S. A shallow bank extends a short distance W from the spit. Bukhta Tyvlikak is entered between Mys Am'yak and a point about 1.5 miles SE.

1.15 South side of Proliv Chehekuyum.—Mys Mertensa (64˚32'N., 172˚25'W.), lying about 4.8 miles SSW of Ostrov Nuneangan, is a high and bluff point rising to a conspicuous mountain with three peaks, about 305m high. The S shore of Proliv Chechekuyum consists of high reddish cliffs for the first 2 miles W of Mys Mertensa, then it slopes evenly to Mys Pivattsigo, the extremity of a spit, about 2.1m high, extending NE from the coast. A fairly sheltered bay lies on the E side of this spit. The bay has depths of 18.3 to 42m, the bottom being shells and stones over mud. Within Mys Pivattsigo the land rises to a mountain, about 762m high, from which a range extends SE toward Mys Chaplina.

1.16 West side of Proliv Senyavina.—Mys Kuvylokuok (64˚39'N., 172˚50'W.), lying almost 4 miles NW of Mys Pivattsigo, is a fairly high and bluff point. A reef extends 0.2 mile NE of the point.

Bukhta Kalelen is entered between Mys Kuvylokuok and Mys Kunuk, about 2 miles NNW. A fairly high and bluff point similar to Mys Kuvylokuok is located about 2 miles WNW of this point. On the W side of this inner point is a bay, W of which the mountains recede inland and the coast is formed by low tundra. The N shore of the inlet rises to mountains, 397 to 503m high. At the head of the inlet is a lake, fed by numerous mountain streams, and from which a shallow stream flows through a sandy neck of land into the inlet.

Anchorage.—Fairly sheltered anchorage can be obtained in the small bight entered W of Mys Kuvylokuok. The depths are considerable close offshore.

Anchorage can be obtained anywhere in Bukhta Kalelen within the point located about 2 miles WNW of Mys Kuvylokuok. The bottom is mud throughout. There is also anchorage, excellent shelter, in depths of about 33m, W of the third point on the S side of the inlet. Anchorage can also be obtained in depths of 7 to 9m, near some cliffs on the S side of the head of the inlet.

Bukhta Rumilet, a deep inlet, is entered S of Mys Kuvylokuok. The inlet is landlocked by mountains about 610m high, which prevent the sun's rays from entering. Ice usually extends some distance offshore.

The coast from Mys Kunuk to **Mys Irankhi** (64˚47'N., 172˚45'W.), about 6 miles NNE, is partly steep and partly sloping, but mountainous throughout. Settlements are situated near the streams flowing down the slopes along this coast. Shoal water, with depths of 2.7 to 6.4m, extend as far as 0.7 mile E from the coast in places. Some rocks that uncover at LW are located close offshore about 0.5 mile NE of Mys Kunuk.

Proliv Senyavina and Proliv Chechekuyum to Anadyrskiy Zaliv (Gulf of Anadyr)

1.17 Mys Chaplina (64˚24'N., 172˚14'W.) is the extremity of a low sand and gravel spit extending about 5 miles E from the general line of the coast. On this spit is a freshwater lake, and near its extremity is the village of Oumwaidjik. The mountains along this coast are some distance inland of Mys Chaplina, but approach the coast near Mys Mertensa, about 9 miles NNW.

Tides—Currents.—A current setting E at a velocity of 2 knots may be experienced on the S side of the spit.

Aspect.—A conspicuous mountain, 415m high, is located about 6 miles WNW of Mys Chaplina.

A light is shown on Mys Chaplina. A radiobeacon transmits from the lighthouse.

Approaching Mys Chaplina from the SW, the sloping cliff some distance W of the cape is first sighted, then the inshore part of the spit, which is about 9.1 to 12.2m high and slopes down gradually to seaward, and finally the buildings of the village which appear as a fleet of fishing boats until the whole spit is visible.

A shoal patch, with a depth of 11m surrounded by depths of 28 to 29m, is located about 8.5 miles SSW of the cape. The depths decrease rapidly from about 28m to depths of 18.3m at a distance of 1.2 miles, and to 16.5m less than 1 mile from the spit. A depth of 14.6m lies about 3.5 miles E of the spit.

Anchorage.—Anchorage can be obtained in 12 to 18m, hard sand and shells, about 0.5 to 1 mile off the N or S side of the spit, depending on the wind. Closer to the spit the bottom is fine sand. Anchorage has been obtained in a depth of 14.6m, 0.2 mile offshore. During a swell from any direction the shore is marked by breakers.

Bukhta Tkachen (Zaliv Tkachen) is entered between **Mys Sivol'kut** (Mys Pravyy Vkhodnoi) (64˚22'N., 172˚36'W.) and Mys Ploskiy, about 8 miles SW. The SW side of the inlet rises to sharply-peaked mountains and the shores of the inlet are formed by dark precipitous bare rocks. Numerous settlements are situated around the inlet.

Mys Skobeleva, about 4.5 miles WNW of Mys Sivol'kut, rises to a sharp conical peak, Gora Kakitaruk. Mys Cherkasskogo, about 5 miles N of Mys Ploskiy, is low. A bank, with a depth of 5.2m at its outer end, extends 0.8 mile E of Mys Cherkasskogo. A bank, with depths of 6.4 to 7.3m, extends about 1.5 miles W from Mys Skobeleva.

A vessel entering the inlet should pass 1.5 miles E of Mys Cherkasskogo, then alter course to pass 0.5 mile off the W side of the inlet abreast Mys Skobeleva.

Several spits extend from the shore near the head of the bay alongside which whalers secure. Because of its great depths the inlet is unsuitable as an anchorage. The N half of the inlet is

sheltered from all winds, and is an excellent refuge. It also has the advantage of easy entrance, and the suitability for vessels to secure close inshore. A 4.1m patch lies about 0.8 mile SE of Mys Vyazemskogo, the SE extremity of a spit extending from the N shore of the inner part of the inlet.

Although Bukhta Tkachen is easily accessible, Bukhta Slavyanka is a more convenient harbor, especially during the autumn.

Zaliv Kuguan is formed between Mys Ploskiy and Mys Nizmenny, about 3 miles SW. Zaliv Kuguan has not been surveyed. Local reports state that a narrow channel, with depths of about 1.5m at the head of the bay, leads to a broad, deep lagoon, on the shores of which there are many settlements. A light is shown from each of the capes at the entrance to Zaliv Kuguan.

Mys Chukotskiy (64˚14'N., 173˚05'W.), lying 4.5 miles WSW of Mys Nizmenny, is a black cape rising to a pointed ridge. At its extremity is a hill with a rounded summit, on the S end of which are several high pointed rocks. The cape is easily distinguished from the E or W, but from the S it merges with the coast. Several drying rocks lie off the SE side of the cape. Kivak Light is shown on the coast 3.2 miles ENE of Mys Chukotskiy.

Anadyrskiy Zaliv (Gulf Of Anadyr)

1.18 Anadyrskiy Zaliv is entered between Mys Chukotskiy and Mys Voyennykh Topografov (Mys Faddeya) (Cape Thaddeus), about 215 miles WSW, and extends as far as 200 miles N. The principal bays in this gulf are Bukhta Provideniya, on the E side close within the entrance, Zaliv Kresta, at the head of the gulf, and Anadyrskiy Liman, at the NW end of the gulf.

The shores of the gulf are fairly high, except for most of the W shore below Anadyrskiy Liman. This stretch is free from snow in the summer and is covered with grass and in places with scrub. Many of the hills along the shores of the gulf appear to be formed of coal from a distance, but are composed of dark gray stone.

Tenedos Shoal (64˚16'N., 178˚00'W.), with a depth of 2.4m, the existence of which is doubtful, is charted in the middle of the gulf, about 125 miles W of the E entrance point.

Bukhta Provideniya (Providence Bay)

1.19 From Mys Chukotski to Mys Lysaya Golova, about 7 miles WNW, the coast is low. The low land extends inland to Ozero Avan forming a cleft in the mountains which is noticeable from the S.

Bukhta Provideniya, entered between **Mys Lysaya Golova** (64˚17'N., 173˚22'W.) and Mys Lesovskogo, about 5.5 miles WNW, is hemmed in on all sides by rugged mountains over 610m high. The shores of the inlet consist of precipitous cliffs, and are marked by landslides, which usually terminate in spits projecting into the water. Many swift mountain torrents flow into the inlet. The only vegetation is lichen and moss. Bukhta Komsomol'skaya (Bukhta Emma), about midway along the E side of the inlet, is the only important harbor in the inlet.

An approach channel (027˚-207˚) extends up to about 12 miles seaward of the entrance to Bukhta Provideniya and may best be seen on the chart. Vessels should keep outside Russian territorial waters until reaching the channel.

Mys Lesovskogo Light, on the W side of the entrance, operates throughout the year, but other lights in the inlet operate only from late July to early December.

Ice.—The following are the general conditions at Bukhta Provideniya: the period of ice formation, October and November; formation of solid ice (the type ordinarily unnavigable, but occasionally penetrable by powerful icebreakers), November and December; period of break up, April and May; date of clearing, late June.

Caution.—A local magnetic anomaly, believed to be caused by the magnetic character of the mountains, has been reported in the vicinity of Bukhta Provideniya. However, a U.S. government research vessel observed no magnetic anomalies in September, 1987.

Mys Lysaya Golova, the E entrance point of Bukhta Provideniya, is bluff, high, and can be easily identified from its peculiar shape which somewhat resembles a man's head. The E slope of the point is fairly gentle, but the S and W slopes are precipitous. The slopes are covered with reddish-brown tundra, and the cliffs, especially those on the W side, are of a bright-yellowish color. Avan', a fairly large settlement, is situated on the E side of Mys Lysaya. Four small buildings stand at this location. The N building has a green roof and the S building is white. This location appears as a coastal station. A light is shown from a framework tower on the E slope of Mys Lysaya Golova.

Caution.—Vessels entering Bukhta Provideniya must be careful not to mistake the low land E of Mys Lysaya Golova for the entrance.

Mys Lesovskogo (64˚20'N., 173˚33'W.), the W entrance point of Port Provideniya, appears from seaward as a black detached islet standing out prominently against the distant high land of the coast. Rocks fringe the cape. A detached above-water rock lies off its S side.

Lesovskogo Light is situated 0.8 mile WNW of the S extremity of Mys Lesovskogo. A radiobeacon transmits 135m ESE of the light.

Severnyy Light is shown 0.9 mile NE of Mys Lesovskogo. Kamen Severnyy, a rock, lies 0.1 mile S of the light.

Zapadnyy Light is shown 4.2 miles NE of Mys Lesovskogo.

1.20 Bukhta Slavyanka (Reyd Plover) (64˚22'N., 173˚21'W.) is a roadstead on the E side of Bukhta Provideniya; it is entered N of Mys Gaydamak, the N extremity of a spit which forms the W and S sides of the roadstead. Several settlements and small lakes are situated on the spit. However, these settlements have been burned or abandoned and only ruins are visible. A light is situated on the spit of Mys Gaydamak. During the summer, large masses of snow remain in the ravines and on the shores. Shoaling extends into Bukhta Provideniya from the N to the W from the spit of Mys Gaydamak. Discolored water has been observed upon departure from the port. The roadstead has general depths of 29

to 40m and is protected. The holding ground is a composite of slate, and a vessel may drag anchor during heavy N gales.

Mys Gaydamak Light looking E from Bukhta Provideniya

Tides—Currents.—The mean tidal range at Bukhta Slavyanka is 0.7m and the spring tidal range is 0.9m.

Bukhta Komsomol'skaya (Bukhta Emma), about 4.5 miles NE of Bukhta Slavyanka, is entered between **Mys Puzino** (64˚25'N., 173˚14'W.) and Mys Likhacheva, about 0.7 mile N, but the entrance fairway is narrowed to a width of 0.5 mile by the sandbanks extending from both entrance points. Atop Mys Puzino, the S point of the entrance to Bukhta Komsomol'skaya, are two white, one story buildings with a marine radar unit mounted on a cupola on the larger building. The shores of the harbor are low, but lofty mountains extend around Bukhta Komsomol'skaya, except on the S side of the harbor. A small river discharges on the S side of the harbor.

The depth in the center of the entrance is 30m and there are depths of 20 to 30m in the fairway up to 1.5 miles within the entrance. The bottom in depths greater than 20m is mud.

Urelyk is a village on the S shore of Bukhta Komsomol'skaya. There are several small jetties for the use of local craft.

Mys Snaryadnyy protrudes from the SE shore of Bukhta Komsomol'skaya, 2 miles E of Mys Puzino. A rocky bank, with a depth of 5m, lies near the extremity of a rock and shingle shelf extending 0.5 mile N of Mys Snaryadnyy, where it is marked by a lighted buoy.

1.21 Provideniya (64˚23'N., 173˚18'W.) (World Port Index No. 62640), on the NW shore of Bukhta Komsomol'skaya, is a refueling and provisioning port for vessels traveling the Northern Sea Route. It is the only deep water port in the NE part of Siberia. Customs control facilities are available and the port is open to foreign vessels.

Ice.—Navigation into Bukhta Komsomol'skaya is normally possible without the assistance of an icebreaker from mid-June to the end of November. In the period up to 20 July and after 20 November, ice information should be obtained from the harbor authorities before proceeding into the bay. Winter navigation is normally possible with the assistance of an icebreaker.

Tides—Currents.—The tidal range in the port is 2.5m.

Depths—Limitations.—The approach fairway through Bukhta Provideniya to Bukhta Komsomol'skaya is straight and very deep. The limitation on the size of vessels berthed is imposed by the dimensions of the berths rather than by the fairways leading to them.

Pier facilities are, as follows:

Quay	Length	Depth	Remarks
1	240m	10.0m	Coal berth.
2	—	—	Being reconstructed.
3	134m	7.5m	General cargo.
4	—	—	Barges and small craft.
5	207m	7.5m	Fuel products. Ballast.

Aspect.—Range lights lead through Bukhta Provideniya to the entrance to Bukhta Komsomol'skaya. These lights are situated 230m E of Mys Likhacheva. A second set of range lights is situated on the E shore of Bukhta Komsomol'skaya, 1.75 miles ENE of Mys Likacheva, and lead into the bay. A third set of range lights leads through the N part of the bay.

Pilotage.—Pilotage is compulsory for vessels over 500 grt and available 24 hours. The pilot boards 0.8 mile W of Mys Puzino at the junction of the range lines. Request for pilot must be made 4 hours before arrival. Pilotage to some of the piers, including the oil pier, is daylight only, subject to favorable weather conditions. Between November 20 and June 20, vessels proceeding to the port should obtain ice information from the Port Captain.

Request for icebreaker assistance should be forwarded to the Port Captain not later than 48 hours in advance. Vessels visiting the port must request, through the port dispatcher, 4 hours in advance, the correct documentation from the border authorities.

Requests for a pilot and tug assistance, together with the ETA, must be sent 2 hours in advance on VHF channel 16.

All vessel movements within the port are regulated by the Port Captain.

Regulations.—An area in which anchoring, fishing, trawling, navigating with a trailing anchor, and underwater operations are prohibited extends across the entrance to Bukhta Komsomal'skaya.

Signals.—Storm signals and signals relating to ship movements are shown from a mast at the office of the Port Director near Provideniya Quay and are broadcast on VHF channel 16.

Anchorage.—Bukhta Komsomol'skaya affords the best shelter in Bukhta Provideniya. On the SE side of the bay, between positions about 0.6 mile SSE and 1.6 miles ENE, respectively, from Mys Likhacheva, there is a line of numbered anchor berths in depths of 12 to 26m, mud. To the NW of these berths, off Provideniya, there is a large turning area. There is anchorage for tankers in the NE part of the bay.

Quarantine anchorage and anchorage for loading and discharging dangerous cargo are located in Bukhta Slavyanka.

Range markers, at entrance to Bukhta Komsomol'skaya, looking N

The anchorages in Bukhta Komsomol'skaya and Bukhta Slavyanka are not sheltered from the N winds. During strong gales the wind direction changes frequently, causing vessels to yaw and drag anchor.

Caution.—There are dangerous wrecks, marked by lighted buoys, close E of the Offshore Wharf, close S of the Petroleum Wharf, and 0.2 mile ENE of the No. 5 Pier.

The shore between Cape Yakum (64˚25'N., 174˚00'W.) and Cape Chukotskij (64˚15'N., 173˚07'W.) is indented with deep and narrow valleys, curving NNE-SSW parallel with Provideniya Bay, and in poor visibility any of these valleys could be mistaken for the entrance into Provideniya Bay.

Bukhta Provideniya to Zaliv Kresta

1.22 Mys Stoletiya (64˚19'N., 173˚39'W.), 3 miles WSW of Mys Lesovskogo, is blackish, with a crest of pointed rocks, and rises steeply from its base to a flat summit. A detached rock close off the cape appears as an elongated cone when seen from the E or W, but from the S it merges with the land. A beacon consisting of a truncated pyramidal structure is situated on Mys Stoletiya.

Mys Yakun, about 11 miles farther NW, is a rugged cape rising to a height of 315m and may be identified by a pyramidal rock on its summit. Mys Zelenyy, about 11.5 miles NW of Mys Yakun, rises almost vertically to a great height and has a very conspicuous red stripe extending from its base to its summit.

The coast from Mys Zelenyy to Mys Shpanberga, about 13 miles NW, is rugged in its greater part. Mys Shpanberga is high and appears as a high cliff with a rounded summit when seen from the S, and as a rounded hill with gently sloping sides when seen from the W.

Guba Bezymennaya (64˚45'N., 174˚50'W.) is entered between Mys Shpanberga and Mys Gal'gan, about 11 miles WNW. The latter cape rises precipitously to an elevation of 475m. From the S a sloping headland is seen extending from the E side of the cape, but from the W the cape appears as a sharp jagged ridge. Close off its E side is a detached pillar rock.

Mys Achchen (64˚46'N., 175˚26'W.), about 9 miles W of Mys Gal'gan, is a cliffy cape rising to a flat summit, 220m high. Bukhta (Guba) Preobrazheniya, entered about 2 miles N of Mys Achchen, is bordered by low shores, and has depths of 18.3m, with a bottom of fine sand.

From the N entrance point of Bukhta Preobrazheniya to Mys Enmelen, about 11 miles NW, the coast is high, precipitous, and wall-like. Mys Enmelen rises close inland to Gora Enmelen, 670m high.

Mys Beringa (65˚00'N., 175˚54'W.), a rugged cape lying about 4 miles NNW of Mys Enmelen and rising to an elevation of 420m, is conspicuous, as it is the W termination of the coastal cliffs, which are almost continuous from Mys Chukhotskiy. The coast N of Mys Beringa becomes lower.

Between Mys Beringa and Mys Chirikova, about 16 miles N, a bay is formed, the S part of which is sometimes known as Whaler Bay. The S part of this coast rises to low hills covered with tundra, and the N part is shelving and consists of low bluffs.

Mys Chirikova rises to a sharp conspicuous peak. About 4 miles farther N is a cliffy headland, 145m high. From this headland a narrow spit, on which is a walrus rookery, extends NW forming Bukhta Ruddera.

For about 25 miles WNW of Bukhta Ruddera the coast is mountainous, the mountains being higher than those on the NE side of Anadyrskiy Zaliv. Some are pointed, others are flat-topped, and all are irregularly scattered. Many brooks and streams flow through the deep ravines.

1.23 Ostrov Kosa Meechkyn (Kosa Meechkin) (65˚28'N., 178˚00'W.) is a narrow sandy spit, extending WSW and W for about 40 miles. The W end extends into the entrance of Zaliv Kresta. The spit is covered with grass only in places where the dwellings exist. The remainder is composed of heaps of stones. The mainland shore N of the spit consists of low, reddish cliffs, N of which barren tundra extends to the foot of the mountains, about 7 to 10 miles inland. A narrow, shallow passage separates the spit from the mainland.

The whole of the N side of Ostrov Kosa Meechkyn is convenient for landing, except during winds from the NW to NE. Water has been obtained from the spit.

Caution.—Several 8.2 to 8.7m patches are located as far as 12 miles SE of the E end of the spit.

Zaliv Kresta

1.24 Zaliv Kresta (Holy Cross Bay) is entered between the W extremity of Ostrov Kosa Meechkyn (65˚28'N., 178˚00'W.) and a point about 12.5 miles WNW. The cliffs forming the shores of Zaliv Kresta consist of broken rocks. Dry tundra exists at various distances from the shore.

Gora Serdtse Kamen (65˚37'N., 178˚17'W.), which is locally called Gora Linlingai, lies about 14 miles NE of the W extremity of Kosa Meechkyn and is an offshoot of the range extending NE.

Gora Matatchingai, 2,798m high, located near the head of Zaliv Kresta, about 60 miles N of the E entrance point, rises above the surrounding heights, and is conspicuous because of its somber, rugged slopes. It is a good landmark for entering the gulf.

Ice.—At the end of September, sludge ice appears in Zaliv Kresta and by late November the gulf is frozen solid. Occasionally the ice is broken up and carried out of the gulf. In June, final break-up usually occurs, but drifting ice floes sometimes remain until mid-July.

Tides—Currents.—The MHW interval at Bukhta Engaugyn is 8 hours 36 minutes. The mean range of the tide is 2m and the spring range is 2.6m.

The tidal currents follow the shore of Zaliv Kresta, with the flood current setting N and the ebb current S. The latter current is stronger and flows for a longer period than the former. In the middle of the gulf the tidal currents are weak, but in all the narrow channels they are strong. Off the E entrance point the flood current sets NW at a maximum velocity of 1.5 knots.

Caution.—A shoal, with a depth of 5.8m, lies about 2.5 miles W of the W extremity of Ostrov Kosa Meechkyn. A shoal has also been reported about 1 mile to 1.5 miles SW of the same point. This shoal is not marked by breakers, but tide rips may be seen. Another shoal, position doubtful, was also reported about 2.5 miles SW of the point.Vessels entering the gulf should avoid the shoals by giving the W end of Ostrov Kosa Meechkyn a berth of at least 4 miles.

1.25 East side of Zaliv Kresta.—The E part of Zaliv Kresta consists of cliffs 4 to 20m high, but in places there are low beaches. There are no high hills near this coast, except Gora Serdtse Kamen, but smooth tundra rises gently in some places to low hills. In many places there are pools and small lakes of rain or snow water.

Anchorage.—Kamangaut Anchorage, NE of the W extremity of Ostrov Kosa Meechkyn, offers good anchorage exposed to the N and NW in depths of 9 to 18m, mud. The best berth is in 18m, sand and mud, with the W extremity bearing 236˚, distant 1 mile. Vessels entering the anchorage should give the W extremity of Ostrov Kosa Meechkyn a berth of at least 4 miles, and not alter course to the anchorage until the W extremity bears more than 135˚.

Mys Kangynin (Mys Konergino) (65˚54'N., 178˚53'W.) is the NW extremity of a moderately broad and elevated spit covered with dry tundra. The best anchorage in the bay N of Mys Kangynin is in depths of 9 to 14.6m, mud, 0.3 to 0.5 mile NNE of the point.

Bukhta Kangynin (Guba Kangynin) is entered N of Mys Erulya, the N extremity of a low sandy spit, about 8 miles N of Mys Kangynin. The E shore of the bay is similar to the shore S, but its W side is mountainous. Because of its shallowness and rocky bottom the bay is not recommended.

1.26 West side of Zaliv Kresta.—The S part of the coast on the W side of Zaliv Kresta to within about 10 miles of Bukhta Engaugyn is similar to the E side, being low for its greater part. Level tundra extends a great distance W, and low flat-topped hills stand out in 2 or 3 places. In the N part of this coast, the mountains approach fairly close to the shore, forming high cliffs in places.

Anchorage.—Good anchorage was reported obtainable close to and N of the W entrance point of Zaliv Kresta, on which is the village of Uel'Kal (Velkal).

Bukhta Engaungyn (66˚08'N., 179˚45'W.), in the NW corner of Zaliv Kresta, is protected S by a spit extending about 2 miles W from a 152m cliff, which rises to a moderately pointed hill on the E side of the bay. A small islet lies about 0.5 mile NW of the W extremity of the spit. The entrance to the bay, in which there is a shoal with a depth of about 0.3m, lies between the spit and the islet. A shoal, with a depth of 1.2m, is located in the middle of the bay, about 1.5 miles NE of the islet. The bay provides an excellent harbor, the only one in Zaliv Kresta. The bottom is mud.

Temporary anchorage can be obtained off the entrance of Bukhta Engaungyn, exposed to S and SE winds in 12.8 to 18m, mud. There is reported to be good anchorage sheltered from all winds in the bay.

1.27 North side of Zaliv Kresta.—The N shore of Zaliv Kresta, with high mountains projecting in three forbidding promontories, contrasts with the E and W shores. A channel is entered between **Mys Razdelny** (66˚10'N., 178˚52'W.), the S extremity of the E promontory, and Mys Kamennyy, about 9 miles W, the SE extremity of the W promontory. This channel is then divided into Guba Egvekinot (Guba Egvskinot) and Guba Etel'kuyum by the central promontory which terminates S in a rocky headland. The channel does not provide secure anchorage due to tide-rips, and strong winds cause a considerable sea.

Guba Egvekinot, the E of the two bays, has a large depression, covered with tundra at its head. Anchorage can be obtained in depths of 18 to 27m about 0.5 mile off the W shore,

but strong winds from the N or S raise some sea and swell. Shallow water extends as far as 0.2 mile off the E shore. The bottom is mud, and in places it is shell and rock.

Guba Etelkuyum, the W of the two bays, offers anchorage, sheltered from all winds near its head, in depths of about 24m. Bukhta Kruzhenshtern is formed by a spit extending about 0.6 mile WNW from about the middle of the N shore of Guba Etel'kuyum. This small bay affords anchorage in 14.6 to 26m, mud. Vessels can also secure to the N side of the spit, which has considerable depths close inshore. The village of Utvuren-Vuk is situated on the N side of the bay.

Zaliv Kresta to Anadyrskiy Liman

1.28 From the mountains near the head of Zaliv Kresta, three ridges spread out over a broad plain stretching to Reka Anadyr'. These ridges are almost parallel to each other, the first being about 14 miles from the coast and the other two being from 5 to 8 miles farther inland. The land between the first ridge and the coast consists of tundra. The first of these ridges is high in its W part, but becomes lower and changes to a line of low hills near Zaliv Kresta. The other two ridges are low in the W and central parts, but become higher near Zaliv Kresta.

Mys Povorotnyy (65˚08'N., 179˚40'W.) is a dark bluff point. The coast from Mys Povorotnyy to the root of Kosa Russkaya Koshka, about 50 miles SW, has a reddish color, is steep-to, and rises steeply from the sea, but is not marked by any definite landmarks. Many settlements are situated along this stretch.

Anadyrskiy Liman (Anadyr Bay)

1.29 Anadyrskiy Liman, the estuary of Reka Anadyr', is entered between the SW extremity of **Kosa Russkaya Koshka** (64˚34'N., 178˚32'E.) and Mys Geka, about 11 miles SW. Kosa Russkaya Koshka, extending about 11 miles SW from the mainland, is a sandy spit about 1.2m high. Mys Geka is the N extremity of a low sandspit, known locally as Strelka Spit.

Anadyrskiy Liman is reported to be a summer naval base, and one of the chief stops on the Northern Sea Route. The shores are devoid of trees and contain several villages. The water in the bay and the approach is muddy and only slightly salty.

Ice.—Ice first appears in Anadyrskiy Liman in September or at the beginning of October. Later in October the estuary is said to freeze solid. Ice frequently remains until mid-July. The normal navigation season is reported to extend from July to mid-October.

Tides—Currents.—The HW interval at the mouth of Reka Anadry' is 10 hours 57 minutes. The spring range is about 1.5m and the neap range is about 1.2m.

The directions and velocities of the tidal currents and other currents in Anadyrskiy Liman vary greatly from place to place. In the entrance the flood current sets W and the ebb E. In Bukhta Klinkovstrema the tidal currents attain a velocity of 3.3 knots. In the narrows between Mys Aleksandra and Mys Observatsii the currents attain a velocity of 4.5 knots. The ebb current commences at least 1 hour before HW. The flood current lasts for about 5 hours and the ebb for 7 hours 30 minutes. Close W of Mys Aleksandra the velocity of the ebb current is 4.5 knots, but during strong NW winds the velocity may increase to as much as 6 knots. Eastward of Mys Geka a current sets NNE at times.

Depths—Limitations.—A shoal, position doubtful, sometimes marked by breakers, was reported about 14 miles ESE of the NE entrance point of the bay.

Sparse soundings seem to indicate that the 10m curve is about 6.5 miles SE of the SW half of Kosa Russkaya Koshka, and about 6 miles E of Mys Geka.

The channel through the bay N of Banka Rayd (Mel Raid) has a least charted depth of 9.6m in the fairway for about 14 miles, then a least charted depth of 5.9m to the mouth of Reka Anadyr'.

Aspect.—Gora Sokolova Vtoraya, two mountains 2 miles apart and with rounded summits, lie about 18 miles NE of Mys Vasiliya, the W extremity of Kosa Russkaya Koshka. Being at the E end of the N shore of Anadyrskiy Liman, these mountains form a good landmark to a vessel approaching this bay.

Gora Primetnaya, 259m high, about 14 miles NW of Mys Vasiliya, is a conspicuous black conical hill. Gora Ioanna, 966m high, about 4 miles N of Gora Primetnaya, is the highest summit of the mountain range extending W from Gora Sokolova Vtoraya. This range terminates in Gora Marii, 381m high, located close to the shore, about 8 miles WSW of Gora Primetnaya.

Gora Dionisiya (64˚35'N., 177˚16'E.) and a hill 384m high, close NE, on the W side of the bay, are the only ones of similar elevation in the vicinity. They form an excellent landmark for the inner part of the bay.

Pilotage.—Pilotage is compulsory. The pilot station is situated about 8 miles WNW of the S extremity of Kosa Russkaya Koshka off the W entrance point of Bukhta Klinkovstrema.

1.30 North side of the fairway.—A radiobeacon transmits from the extremity of Kosa Russkaya Koshka. A beacon consisting of a framework pyramid, 12m high, stands on the SE side of Kosa Russkaya Koshka, about 2 miles NE of its extremity.

A white beacon, surmounted by two cones, points together, 11m high, stands about 5 miles NW of Mys Vasiliya, at the root of Kosa Nikolaya, a low sandy spit. A lighted buoy is moored about 2.3 miles SW of the W extremity of the sandspit.

Kosa Salomatova is located about 5 miles W of Kosa Nikolaya. A light is shown from the extremity of Kosa Salomatova, and a lighted buoy is moored about 2.5 miles SW of the light.

Ostrov Alyumka (64˚41'N., 177˚37'E.) is a small and low islet, and resembles a sarcophagus. The islet is a good mark for making the entrance to Reka Anadyr'. The water in the river above the islet is fresh. A reef, on which the sea breaks, extends 0.3 mile SSE from the islet.

Mys Observatsii, about 5 miles NNW of Ostrov Alyumka, terminates S in a steep, reddish bluff, which is conspicuous from the S.

1.31 South side of the fairway.—Mys Geka (64˚26'N., 178˚14'E.), locally called Strelka Spit, the SE entrance point of Anadyrskiy Liman, has shoal water extending off it on all

sides. The 5m curve lies 0.7 mile N and 1.5 miles E of the point. A village is situated on the point.

The S part of Anadyrskiy Liman, between Mys Geka and Mys Dionisiya, about 22 miles NW, is shallow, and local boats cannot approach the shore closer than 0.1 mile. Banka Rayd (Mel Raid), an extension of this shallow area, approaches the N shore of the bay as close as 2 miles. It has depths of less than 5.5m. Kamen' Rayd, a reef with a least depth of 1.2m in the W part of Banka Rayd, is marked by breakers, except at HW.

Seams of coal are exposed by the landslides in the vicinity of Mys Dionisiya.

Mys Aleksandra (64˚44'N., 177˚32'E.), the S entrance point of Reka Anadyr', is the N extremity of a spit consisting of alluvial rubble, which lies on the E side of the mouth of Reka Kazachka. A spit that covers at HW extends off Mys Aleksandra, and shoal water with depths of less than 3.7m extends as far as 0.4 mile E from the point.

Caution.—Caution should be exercised in navigating the area off Mys Aleksandra, as depths of 1 to 2m less than charted may exist.

Due to insufficient information concerning relocation and maintenance, many navigational aids within Anadyrskiy Liman and its approaches are not shown on the chart.

Anadyr' (64˚44'N., 177˚30'E.) (World Port Index No. 62650), situated in the vicinity of Mys Aleksandra, has no wharves for oceangoing vessels, and cargo is handled at the anchorage by lighters. The towers of a radio station are situated in the town.

A pier, 60m long and suitable for fishing boats, was reported in Bukhta Melkaya, a shallow bay entered W of Mys Observatsiy. Banka Alekseeva, a shoal with a least depth of 0.5m, extends 1 to 1.5 miles NW of Mys Observatsiy.

Anchorage.—To enter Anadyrskiy Liman, local knowledge is advisable. At Anadyr', the best and most sheltered anchorage in the narrows is midway between Mys Aleksandra and Mys Observatsiy in depths of 11 to 12.8m, thick mud. This anchorage is secure as the ebb tidal current is strong here, the strength of the flood tidal current being close to the N shore. Fresh SE winds may raise a considerable sea, but the holding ground is good. Nearer to Mys Aleksandra the bottom is rocky.

At the anchorage of Mys Mikhaila, about 3 miles W of Mys Aleksandra, the bottom consists of fine sand, and the ebb and flood tidal currents are of equal strength.

Anchorage can be obtained in depths of 9 to 10m just inside the entrance to Anadyrskiy Liman, W of Mys Vasiliya, but this anchorage is insecure especially with winds from seaward opposing the ebb current. Communication with the shore is impossible with strong winds.

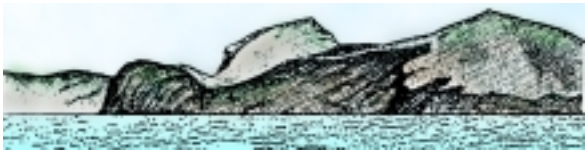
Small craft can find secure anchorage W of Kosa Nikolaya in 3.7 to 4.6m.

1.32 Reka Anadyr' (64˚45'N., 177˚32'E.), flowing through Zaliv Onemen (Onemen Bay), the basin W of Anadarskiy Liman, is estimated to be 620 to 740 miles in length, and is the largest river flowing into the Bering Sea on the Russian side. The banks of the river are low, steep, and covered with scrub. On the N side is continuous tundra, and on the S side, a short distance from the river, are low willow and poplar trees. In general, the river is broad, shallow, and fairly sluggish. It overflows its banks in autumn and spring, rising 4.6 to 6.1m above its normal level in spring, completely submerging the buildings at Anadyr'. There are no dangerous rapids in the lower third of the river. During the time the river is free from ice (July-October), river boats drawing up to 1.4m are said to go upriver as far as Markovo, a distance of about 230 miles; the river is navigable by rafts for about 350 miles farther. The effect of the tide is felt as far as Markovo.

Anadyrskiy Liman to Mys Olyutorskiy

1.33 The coast from Anadyrskiy Liman to **Mys Gintera** (63˚13'N., 179˚14'E.), about 78 miles SSE, is low and sandy throughout, the mountains receding inland N of Mys Gintera. In some places the coast rises to a height of about 6.1m, but in others it is only a narrow strip of land separating a lagoon from the sea. There are said to be native settlements every 10 or 15 miles along this stretch, the inhabitants being engaged in fishing and hunting walrus. coast should not be approached in depths of less than 20.1m.Mys Gintera is high, rises abruptly, and is steep-to. The 20m curve lies close offshore.

Mys Barykova, about 12 miles SE, is steep-to and rises precipitously to a hill. The coast between the above two points is very hilly.



Mys Barykova bearing 209˚distant 16 miles

Bukhta Ugol'naya is entered between Mys Barykova and Mys Korobitsyna, a precipitous point about 11 miles S. The W shore of this bight consists of a sandy beach except for Mys Leonida, a steep-to projecting point which rises steeply to a coal ridge known as Ugol'ny Kryazh. This ridge extends NW. The mouth of Reka Lakhtina, in the N part of the bight, is narrow and very difficult to recognize from seaward during a heavy surf.

1.34 Port Beringovskiy (63˚04'N., 179˚22'E.), situated in the NW part of Bukhta Ugol'naya, is a commercial port for the export of coal.

Winds—Weather.—Fog is most frequent in the bay from May to August, but occasionally may occur during the winter months. Refraction may occur in the bay throughout the year, distorting the coastline and making it difficult to identify.

The prevailing winds are from the NW, except from June to August, when the prevailing winds are from the SE.

Ice.—Ice appears in the head of the bay at the end of October. Ice appears in the bay itself and the approaches to the bay in November and normally clears during June.

Tides—Currents.—The maximum tidal range is about 0.7m.

Depths—Limitations.—The port consists of an outer roadstead and a basin which contains six quays. The basin has

depths of 1.1 to 4.2m. The quays can accommodate vessels with a maximum draft of 2m. Cargo operations are carried out in the roadstead.

The bay is open to winds from the NE through E to the S; during these periods, a heavy swell can build in the bay. If the winds are above force 5, it is recommended that vessels leave the roadstead. If the swell is from the SE or S and is greater than 2m, cargo operations will be carried out in a more sheltered area bounded, as follows:

a. 62 53.1'N,179 22.5'E.
b. 62 53.8'N,179 22.2'E.
c. 62 54.4'N,179 24.0'E.
d. 62 54.1'N,179 22.6'E.

Aspect.—When approaching the port, Mys Otvesny and Mys Barykova are conspicuous. By day the white buildings of the settlement and the storehouses, painted in blue and white squares, can be seen at a distance of 15 miles. On radar a clear image of the basin can be seen.

Range lights are shown at the mouth of Reka Ugol'naya, in the NW part of the bay, and lead into the outer roadstead.

Pilotage.—Pilotage is not compulsory. During the navigation season, from May 15 until November 15, a port pilot may carry out pilotage and anchorage duties. The request for a pilot should be made to the port captain 4 hours before arrival.

The pilot boards 1.6 miles SE of Mys Barykova.

Port Beringovskiy Radio Station, call sign UTST-2 maintains a 24-hour watch on 500 kHz, 451.5 kHz, and 2182 MHz, and VHF channels 9 and 16. The 24-hour watch on VHF channels 9 and 16 is kept only during the navigational season of May 15 to November 15. From November 15 to May 15, the station operates from 2300 to 0700 local time, except for rest days and holidays. Vessels anchored in the roadstead are required to maintain a 24-hour watch on VHF channel 9.

Anchorage.—The port has 12 anchorage positions, one of which is reserved for vessels carrying oil products or dangerous cargo, centered on 63 02.4'N,179 23.0'E. Anchorage positions are regulated by the port director.

Anchorage is available in 10m, sand, with the mouth of Reka Lakhtina bearing about 225˚, distant 1.7 miles. Anchorage can also be obtained in depths of 18m in the S part of the bight.

Caution.—A wreck, with a depth of 2m, lies 1.4 miles WNW of Mys Barykova. Another wreck, with a depth of 7.5m, lies 1 mile WSW of Mys Barykova. An isolated depth of 2.8m lies 1.8 miles WNW of Mys Barykova.

1.35 The coast from Mys Korobitsyna to Mys Voyennykh Topografov, about 14 miles S, consists of a stretch, 21m high at first, which then becomes high and steep.

Mys Voyennykh Topografov (62˚38'N., 179˚38'E.), the W entrance point of Anadyrskiy Zaliv, is bluff and steep-to, rising to a 660m rounded summit about 1.8 miles inland. On the SE side of the cape is a large cylindrical projection about 579m high. On the cliffs at the cape the strata have a slight inclination to N, while on Mys Kinga, about 13 miles SW, the strata have a slight inclination S.

Bukhta Ushakova, with its N entrance point about 4 miles S of Mys Voyennykh Topografov, appears from the offing to indent the coast much farther than it does, as the head of the bay is low and a long narrow valley extends inland from it. Mys Sinop, the S entrance point of the bay, is a high, steep bluff. Mys Gangut, about 1 mile SW, is also a high bluff, rising steeply to a height of 370m. About 2 miles offshore in the middle of Bukhta Ushakova are depths of 14.6 to 16.5m, over black sand, flint, and shell.

1.36 Guba Gavriila (Archangel Gabriel Bay) is entered between **Mys Basova** (Mys Kinga) (62˚27'N., 179˚22'E.), a steep rocky point fringed by drying rocks, and Mys Bezymyanny, about 7.5 miles SW. A heavy swell rolls into the bay even in calm weather. With a light wind from the E, the swell rapidly increases, causing a heavy surf along the whole shore, making the bay unsafe for small vessels. From seaward, the bay appears to extend farther into the land because of Laguna Orianda, a spacious lagoon separated from the head of the bay by a narrow strip of land. Although the lagoon does not seem to have any direct communication with the bay, it is salty and rises and falls with the tide.

The depths in the bay decrease from about 26m in the entrance to depths of 8.7m, fine sand, near the head.

Mys Bezymyanny is a steep rocky point rising to a height of 439m. A light, from which a radiobeacon transmits, is situated about 1.2 miles SW of the point.

Mys Chesma, about 3.5 miles S, rises to a height of 329m. Close off the latter point are several pillar rocks. Two low, flat rocks and some drying rocks lie 0.5 mile and 0.8 mile E, respectively, of the point.

Bukhta Greiga, a bight between the above-mentioned points, is reported to provide anchorage during SW winds in depths of 5.5 to 12.8m, with Mys Chesma bearing 166˚, distant 1 mile.

The coast from Mys Chesma to Mys Navarin rises steeply to a range of hills, 355 to 430m high.

Mys Navarin (62˚15'N., 179˚07'E.), the S extremity of a peninsula, is fringed by drying rocks. Two columnar rocks, 42m high, are located close offshore, about 0.3 and 0.6 mile NE, respectively, of the cape.

The coast in the vicinity of the cape is high, precipitous, barren, and rocky. It is frequented by large flocks of various species of birds.

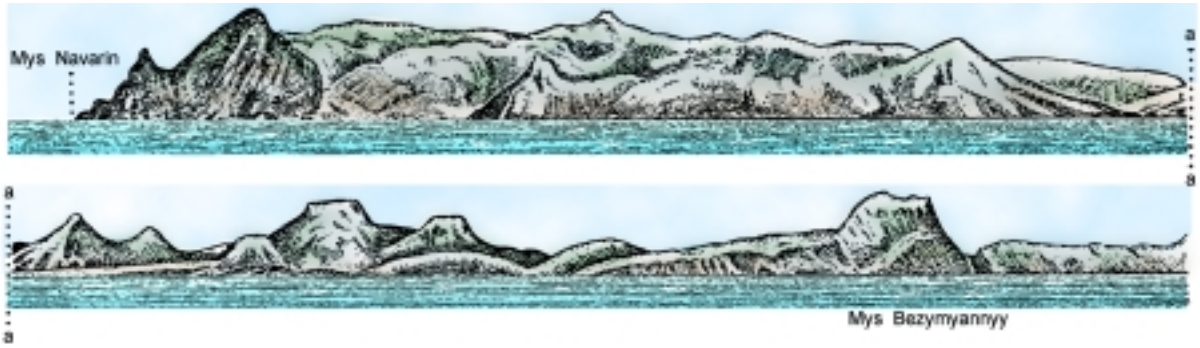
Gora Geidena, about 11 miles NW of Mys Navarin, is the summit of a range extending from the cape. It is conspicuous because of its conical shape, and becomes covered with snow in September.

Caution.—Shoals, positions doubtful, of 11.9m and 17.8m, lie about 47 miles and 60 miles SW, respectively, of Mys Navarin.

Due to insufficient information concerning the relocation and maintenance, many navigational aids between Mys Gintera and Mys Navarin are not shown on the chart.

1.37 The coast from Mys Navarin to **Mys Nizkig** (61˚37'N., 173˚50'E.) for the first 25 miles is high and rises steeply from the sea, and between the mountains are small valleys.

The 20m curve is about 1 mile offshore along this stretch. The remainder of this coast is much lower and less steep-to, and about every 10 or 15 miles is a lagoon into which usually flows a stream. At Maina Pylgin, about 60 miles WNW of Mys Navarin, there is reported to be a small gravel beach that contrasts with the usual rocky outcrops that generally mark the



Mys Navarin to Mys Bezymyannyy—View in two parts

coast. A fish cannery is situated about 5 miles W of Maina Pylgin.

Caution.—Banks, with depths of 18.3m and 31m, were reported (1951) to lie about 68 miles and 60 miles E, respectively, of Mys Nizki.

Bukhta Dezhneva is entered W of Mys Nizki, which is fringed by drying rocks that extend as far as 0.5 mile S of the point. Several rivers flow into the head of the bay and there is reported to be a considerable current off its entrance with partly fresh water on the surface. There are high cliffs near Mys Orangutang, the W entrance point of the bay.

1.38 Bukhta Anastasii (61˚24'N., 172˚54'E.), entered about 30 miles SW of Mys Nizki, rises steeply to about 610m on its NE and SW sides, but the shore at the head of the bay is low and sandy. Mys Lindgolma, extending SW from the NE side of the bay, has a reef extending 0.5 mile from it, and should be given a wide berth. Some huts are on Mys Lindgolma, and the village of Il'pi is situated about 2 miles NW of the point.

Anchorage.—Anchorage can be obtained in Bukhta Ressina, a small cove N of Mys Lindgolma, in depths of 7m, fine sand, with Mys Lindgolma bearing 148˚, distant 0.8 mile. During strong SE winds, the whole of Bukhta Anastasii is too exposed to SE winds to afford safe anchorage.

Northward of Bukhta Anastasii, the summits of the mountains are rounded and their slopes are covered with grass. South of the bay to Mys Olyutorskiy the coast is high, mountainous, and rugged, and the peaks are pointed. Approaching the bay from the E, the different aspects provide a good landmark. Ostrov Vasiliya, a bluff, barren islet in an indentation close SW of Bukhta Anastasii, and Mys Vitgenshteyna, about 32 miles farther SW, are prominent in the S approach to the bay.

Bukhta Natalii (Natali Bay) is entered between **Mys Vysokiy** (61˚10'N., 172˚42'E.) and Ostrov Bogoslova, a 424m high islet about 6 miles SW. The shores of the bay rise to irregular mountains, 457 to 610m high, and at its head is a low sandy slope and the entrance to a fairly large river.

Bukhta Pavla, an unsurveyed inlet W of Ostrov Bogoslova, has shores which are high and steep-to, and several streams flow into its head. The N entrance point rises to a mountain, 787m high. The depths off the entrance are 26m, increasing to 46m at the entrance, and then decreasing to 33m where the inlet turns NW. The depths then decrease somewhat rapidly toward the head of the inlet.

Anchorage.—Local knowledge is essential in anchoring in the inlet, which affords complete protection. There are no known dangers in it. Anchorage can be obtained in a depth of about 26m off the entrance to the inlet, but it is exposed to the frequent and violent SE winds.

Bukhta Petra, an unsurveyed inlet SW of Ostrov Bogoslova, has depths of 27m in the entrance, decreasing to depths of 9.1 to 11m in what seems to be a bar in the middle. Farther in the depths increase to 14.6 to 18.3m, but then decrease to 11m near the head, where a shoal extends about 0.1 mile offshore.

Bukhta Glubokaya (60˚59'N., 172˚15'E.), entered about 11 miles SW of Ostrov Bogoslava, has rugged and precipitous shores, fringed with rocks that dry. The NE entrance point is fringed by sunken rocks and rocks that dry. A black conical rock, 37m high, is located close off the SW entrance point. Ostrova Kamni Chasovyye (Skaly Chasovye), midway across the inlet, consists of two rocks that dry.

Bukhta Imatra, indenting the SW shore of Bukhta Glubokaya, has a width of about 0.3 to 0.4 mile. The shores of the inlet are high. The depths decrease from 46m in the entrance of the inlet to 16.5m about 0.4 mile from the head. Excellent and protected anchorage can be obtained in Bukhta Imatra. A shoal extends across the inlet from the N shore, about 0.3 mile from the head of the inlet.

Tides—Currents.—At Bukhta Glubokaya the mean diurnal range is 1.3m.

1.39 Mys Vitgenshteyna (60˚51'N., 172˚04'E.) is the S extremity of a promontory which rises close inland to a peak that has the appearance of a pyramid. Two pillar rocks lie close off the E side of the promontory and close to the point.

The coast for about 15 miles SW of Mys Vitgenshteyna is mountainous and rises to sharp peaks. For 6 miles farther SW it is low and covered with boulders to abreast Ostrovok Shlyupochnyy. From a point about 2 miles farther S to **Mys Nizkiy** (60˚24'N., 170˚45'E.), about 26 miles SW, the coast is high, with bold projecting promontories.

An indentation in the coast S of Mys Nizkiy is divided into two bays by a promontory extending from its head. Bukhta Tyulen'ye Ozero, the S bay, about 1.2 miles in length and width, has depths of 7.6 to 14.6m to within 0.2 mile of the shore, except for a 4.9m patch about 0.3 mile off the S shore close inside the entrance.

Mys Olyutorskiy (59˚55'N., 170˚21'E.) is a cape forming the S extremity of Poluostrov Olyutorskiy. The coasts of Poluostrov Olyutorskiy are wild and forbidding, and on the peninsula are barren mountains of volcanic formation, in places covered with snow. The extremity of the cape consists of dark gray cliffs rising steeply to a peak, 783m high, with jagged crags. On the E face of the cape is a dark-gray landslide, and on the W face are two light-gray landslides. Submerged and drying rocks extend 0.2 mile S from the cape, and a detached group of drying rocks lies about 0.7 to 1.3 miles SE of the cape.

A radiobeacon is situated about 7.5 miles NE of Mys Olyutorskiy.

Caution.—A detached 16.5m patch, position doubtful, was reported (1943) about 36 miles S of Mys Olyutorskiy.

A shoal, the existence of which is doubtful, was reported to lie about 120 miles SE of the cape.

Table of Contents